

Abstract

The invention relates to a method and a device for the automated application of a self-adhesive paint film to a three-dimensionally curved bodywork part, using a robotic application tool, the paint film being held ready in the form of a multi-layered film composite ready for picking up. After picking up has taken place, a protective strip on the adhesive side is removed from the film section, which is held taut, by means of a contact piece attached to the film composite on the end side and the adhesive side of the film section is thereby exposed. The paint film section is subsequently aligned above the body part to be covered, at a small distance from it, and is progressively pressed onto the bodywork part from the spaced-apart, taut position by means of a roller or doctor moving over the paint film. In order to be able to apply even large or curved paint film sections without creases and at justifiable tool costs, use is made of a rectangular film composite which protrudes on all sides over the bodywork portion to be covered and is secured on all four sides in a rectangular suction frame. As a result, during the application of the paint film, the latter is held under tensile stress in the longitudinal direction and in the transverse direction. To simplify the tool, the protective strip on the adhesive side is removed from the paint film in a stationary manner.